

IN THE CLAIMS

Claim 2 is currently pending in this application, wherein claim 1 is being canceled without prejudice or disclaimer, while claims 3-17 stand withdrawn from further consideration, all as follows:

1. (Canceled).
2. (Currently Amended) ~~The A~~ radio frequency power amplifier according to claim 1, comprising:

a bipolar transistor for emitter ground amplification having a base coupled to an input terminal and a base bias power supply and having a collector coupled to an output terminal, wherein a resistor and a coil are inserted parallel between the base and the base bias power supply, and

the coil is connected to the base so that a direct current can be conducted through a section between the coil and the base.
3. (Withdrawn) The radio frequency power amplifier according to claim 1, wherein a bias resistor is inserted between the base and the base bias power supply, and there is provided a function of detecting an average voltage at a base-side node of the bias resistor and changing output voltage from the base bias power supply in accordance with a detected value.
4. (Withdrawn) The radio frequency power amplifier according to claim 3, wherein the base bias power supply comprises a first bipolar transistor, first and second resistors, and a first capacitor, and

wherein the first bipolar transistor is configured to ground an emitter, ground a base via the first capacitor, connect a collector to a constant voltage supply via the first resistor, and connect the base to the collector via the second resistor.
5. (Withdrawn) The radio frequency power amplifier according to claim 4, wherein the first bipolar transistor is configured to connect the base to a base of the amplifying bipolar transistor via the first capacitor and a resistor constituting a low-pass filter and

connect the collector to the base of the amplifying bipolar transistor via the bias resistor.

6. (Withdrawn) The radio frequency power amplifier according to claim 5, wherein there are excluded the resistor constituting the low-pass filter and the first capacitor, and the base of the first bipolar transistor is connected to the base of the amplifying bipolar transistor via a coil.

7. (Withdrawn) A radio frequency power amplifier comprising:

a bipolar transistor for emitter ground amplification having a base connected to an input terminal and to a base bias power supply via a bias resistor and having a collector connected to an output terminal; and

a bipolar transistor for average output current detection in which a base is connected not only to a high-frequency input terminal, but also to the base bias power supply via a resistor equivalent to the bias resistor, and a collector is connected to the base bias power supply,

wherein there is provided a function of using the bipolar transistor to detect an average output current and changing output voltage from the base bias power supply in accordance with a detected value.

8. (Withdrawn) The radio frequency power amplifier according to claim 7, wherein the base bias power supply includes a first bipolar transistor, first and second resistors, and a first capacitor, and

wherein the first bipolar transistor is configured to ground an emitter, ground a base via the first capacitor, connect a collector to a constant voltage supply via the first resistor, and connect the base to the collector via the second resistor.

9. (Withdrawn) The radio frequency power amplifier according to claim 8, wherein a collector of the first bipolar transistor is connected to the base of the amplifying bipolar transistor via a bias resistor, and

wherein the detection bipolar transistor is configured to connect the collector to the base of the first bipolar transistor and connect the base not only to the collector

of the first bipolar transistor via a resistor equivalent to the bias resistor, but also to the high-frequency input terminal.

10. (Withdrawn) The radio frequency power amplifier according to claim 7, wherein the base bias power supply comprises a first bipolar transistor, first and second resistors, and a first capacitor, and

wherein the first bipolar transistor is configured to connect a collector to a constant voltage supply, ground an emitter via the first resistor, connect a base to a constant voltage supply via the second resistor, and ground the same via the first capacitor.

11. (Withdrawn) The radio frequency power amplifier according to claim 1, wherein the bipolar transistor is an SiGe hetero-junction bipolar transistor in which the base comprises SiGe mix crystal, and the emitter and the collector comprise Si, and

wherein the bipolar transistor is configured to ground an emitter, connect a base to an input terminal and a base bias power supply, and connect a collector to an output terminal; a bias resistor is inserted between the base and the base bias power supply; and there is provided a function of detecting an average value of base current or collector current and correspondingly changing an output voltage from the base bias power supply.

12. (Withdrawn) A communication system comprising:

- a digital signal processor;
- a baseband section;
- an intermediate frequency (IF) section;
- a synthesizer;
- a down-conversion mixer;
- an up-conversion mixer;
- a driver;
- a power amplifier;
- a low noise amplifier;
- a duplexer; and
- an antenna, wherein the power amplifier comprises:

a bipolar transistor for emitter ground amplification having a base connected to an input terminal and a base bias power supply and having a collector connected to an output terminal.

13. (Withdrawn) The communication system according to claim 12, wherein a resistor and a coil are inserted parallel between the base and the base bias power supply.
14. (Withdrawn) The communication system according to claim 12, wherein a bias resistor is inserted between the base and the base bias power supply, and there is provided a function of detecting an average voltage at a base-side node of the bias resistor and changing output voltage from the base bias power supply in accordance with a detected value.
15. (Withdrawn) The communication system according to claim 14, wherein the base bias power supply comprises a first bipolar transistor, first and second resistors, and a first capacitor, and
wherein the first bipolar transistor is configured to ground an emitter, ground a base via the first capacitor, connect a collector to a constant voltage supply via the first resistor, and connect the base to the collector via the second resistor.
16. (Withdrawn) The communication system according to claim 15, wherein the first bipolar transistor is configured to connect the base to a base of the amplifying bipolar transistor via the first capacitor and a resistor constituting a low-pass filter and connect the collector to the base of the amplifying bipolar transistor via the bias resistor.
17. (Withdrawn) The communication system according to claim 16, wherein there are excluded the resistor constituting the low-pass filter and the first capacitor, and the base of the first bipolar transistor is connected to the base of the amplifying bipolar transistor via a coil.